Amendments to the Claims

This listing of claims will replace all the prior revisions, and listings of claims in this application.

Listing of Claims

2

4

(Currently Amended) A munitions propellant eomprising consisting of:

- an alcohol-wet nitrocellulose component eomprising consisting essentially of about 2 3 65.0% to about 95.0% of the gun munitions propellant by weight, said 4 nitrocellulose component having a Nitrogen proportion of substantially 12.6% 5 Nitrogen; 6 an energetic plasticizer component comprising consisting essentially of about 5% to 7 about 35% of the gun munitions propellant by weight, said energetic plasticizer 8 component comprising N-Butyl-2-Nitratoethyl Nitramine (BuNena); 9 a burning rate moderator and stabilizer component eomprising consisting essentially of from about one-half of one percent (0.5%) to about five percent (5.0%) of the 10 11 gun munitions propellant by weight, wherein the burning rate moderator and 12 stabilizer component is one selected from the group consisting of: Sym-Diethyl 13 Diphenyl Urea, N,N'-Diethyl Carbanilide (Ethyl Centralite, Centralite I); and N-14 Methyl-N', N'-Diphenyl Urea (Akardite II); and 15 a stabilizer component eomprising consisting essentially of about one-half of one 16 percent (0.5%) to about five percent (5.0%) of the gun munitions propellant by 17 weight, and comprising consisting of Acetyl triethyl citrate (ATEC).
 - 2. (Currently Amended) The munitions propellant of claim 1 wherein the nitrocellulose component comprising which is about 65.0% to about 95% of the gun munitions propellant by weight is a combination of a first nitrocellulose composition having a Nitrogen proportion of about 13.4% Nitrogen and a second nitrocellulose composition having a Nitrogen

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- 5 proportion of about 11.3% Nitrogen, such that the combination has an average Nitrogen
- 6 proportion of about 12.6% Nitrogen.
- 1 3. (Currently Amended) The gun munitions propellant of claim 1, further comprising
- 2 consisting essentially of additional components, wherein the additional components
- 3 comprising are less than about 5% of the munitions propellant by weight and consist of
- 4 include a first additional component, comprising which is about 1.0% to 2.0% of the
- 5 munitions propellant by weight, said first additional component eomprising consisting
- 6 essentially of graphite; a second additional component, comprising which is about 1.0% to
- 7 2.0% of the guns munitions propellant by weight, said second additional component
- 8 comprising consisting essentially of Potassium Sulfate; and a third additional component
- 9 comprising which is about 1.0% to 2.0% of the munitions propellant by weight, said third
- 10 additional component comprising consisting essentially of Candelilla Wax.
- 1 4. (Currently Amended) The gun munitions propellant of claim 2, further comprising
- 2 consisting essentially of additional components, wherein the additional components
- 3 comprising are less than about 5% of the gun munitions propellant by weight and consist of
- 4 includes a first additional component, comprising which is about 1.0% to 2.0% of the
- 5 munitions propellant by weight, said first additional component comprising consisting
- 6 essentially of graphite; a second additional component, comprising which is about 1.0% to
- 7 2.0% of the gun munitions propellant by weight, said second additional component
- 8 comprising consisting essentially of Potassium Sulfate; and a third additional component
- 9 comprising which is about 1.0% to 2.0% of the gun munitions propellant by weight, said
- 10 third additional component comprising consisting essentially of Candelilla Wax.
 - 5. (Currently Amended) The gun munitions propellant of claim 4, wherein the nitrocellulose
- 2 component is prepared using organic solvents consisting essentially of Acetone, Ethyl
- 3 Acetate and Di-Ethyl Ether.